

Attorney Docket No.: WARF-0002
Inventors: Laughon, Allen S.
Serial No.: 09/810,385
Filing Date: March 16, 2001
Page 2

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1. (currently amended): A method for identifying compounds that directly interact with a Smad protein or a Smad protein co-repressor to prevent protein-protein or protein-DNA interactions required for repression of transcription induced by TGF- β , activin or bone morphogenetic protein signaling in cells comprising:

(a) determining a first level of transcription detected in cells ~~in the presence of a complex of~~ containing interacting proteins comprising a Smad protein, a Smad protein co-repressor and a CtBP protein before addition of a test compound;

(b) contacting said cells with the test compound; and

(c) determining a second level of transcription detected in cells ~~in the presence of a complex of~~ containing interacting proteins comprising a Smad protein, a Smad protein co-repressor and a CtBP protein after addition of the test compound, wherein a decrease in the level of repression of transcription induced ~~by the presence of the complex of~~ in cells containing interacting proteins comprising the Smad protein, the Smad protein co-repressor and the CtBP protein is indicative of the ability of the test compound to interfere with transcriptional repression and to prevent repression of transcription that is produced by a TGF- β , activin or bone morphogenetic protein signal in cells.

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Page 3

Claim 2. (currently amended): The method of claim 1 wherein transcription levels both before and after addition of the test compound are detected in cells ~~in the presence of~~ containing a Smad protein, a CtBP protein, and a Smad co-repressor protein selected from the group consisting of Evi-1, TGIF, SIP1, and Schnurri.

Claim 3. (original): The method of claim 1 wherein the Smad protein is *Drosophila* Mad or Medea.

Claim 4. (previously presented): The method of claim 1 wherein the CtBP protein is dCtBP, CtBP2 or a homologue of dCtBP.

Claims 5-8 (canceled).